

# Portable Monitor Model 4431-PM



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## VENDOR DESCRIPTION

The Portable Monitor is designed to receive and demodulate transmissions and to decode, process, and display message information that is transmitted by data link equipment. The data link equipment includes Processor/Transmitters, Portable Repeaters, and Fixed Repeaters. Audio transmissions can also be monitored.



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UGS

Power Source		Environmental	
Sensors/Power Transmitters	4 – 6V lantern batteries	High Temp	+60°C/140°F
Supplemental Battery Box	8 – 6V lantern batteries	Altitude	N/A
Monitor	9 each 1.2V NICAD, 4000mAh 12VDC or 115VAC	Humidity	N/A
Repeater	4 – 6V lantern batteries	Immersion	N/A
		Sand/Dust	N/A
		Salt	N/A
		Fungus	N/A
		Shock/Vibe	N/A
		EMI/EMC	N/A
		Low Temp	-30°C/-22°F (Monitor -60°C/-76°F)

Sensor	Description	Detection	Size/Weight	Features
Seismic/Acoustic	Employs sophisticated algorithm to classify targets as personnel, wheeled or tracked veh. based on comb. seismic & acoustic signatures	Tracked Vehicle 0-120 ft Wheeled Vehicle 0-120 ft Personnel 0-30 ft	2.4in x 1.5in x 4.5in Weight: 1.1 lbs	<ul style="list-style-type: none"> <li>■ Passive detection</li> <li>■ Covert operation</li> <li>■ Low false alarm rate</li> <li>■ Quiescent until activated by targets</li> <li>■ Operates on lantern batteries</li> <li>■ Low power DSP</li> </ul>
Passive Infrared	Detects temperature differential between target and background. Provides direction and target count.	Tracked Vehicle 0-160 ft Wheeled Vehicle 0-160 ft Personnel 0-80 ft	1.3in x 3.7in or 3.5in x 12.9in Weight: 3.1 lbs.	
Magnetic	Detects movement of ferrous metals. Provides direction and target count.	Tracked Vehicle 0-50 ft Wheeled Vehicle 0-50 ft Personnel 0-8 ft	4in x 3.5in Weight: 1.1lbs	

Device	Description	Message Type	Size/Weight	Features
Monitor	Provides the capability to display sensor transmissions. Can be used to relay sensor data to an external digital display via built-in RS-232 port.	Manchester Format	13in L x 16in W x 7in D Weight: 3.3lbs	<ul style="list-style-type: none"> <li>■ 2 MHz between channels</li> <li>■ VHF 162MHz to 174MHz band</li> <li>■ 2 crystal-controlled frequencies</li> <li>■ LPI/LPD ultra-short burst transmissions</li> <li>■ 5-watt transmitters</li> </ul>
Repeater	Utilized to overcome line-of-sight obstructions or extend communications range by 50 miles	Manchester Format	13in L x 12in W x 6in D Weight: 3.3lbs	